GCAD TRAINING USE CASE | DATA STORYTELLING USING EXCEL & POWERPOINT (ADVANCED)

FY2025 Procurement Spend Review

From data to insight with the 5-step process

CAUTION All data in this use case is fictional. Names, IDs and amounts are for training only.

1. Background

Group Procurement buys goods and services for six Business Units (BUs) at Head Office: Group Technology, Group Property & Facilities, Group Marketing & Communications, Group Human Resources, Group Finance and Group Operations.

At the January 2026 management meeting, the Group CFO said that FY2025 procurement spend increased by about 15%. Business volume and headcount increased by about 5%. The Chief Internal Auditor (CIA) asked the GCAD data analytics team for a data-based review before the Q1 2026 Board Audit Committee (BAC) meeting.

Controls that are in place

- **Approval limits.** L1 Head of Department up to RM50,000. L2 Head of BU up to RM250,000. L3 Group CFO up to RM1,000,000. L4 Group Tender Committee above RM1,000,000.
- **No split POs.** Group Procurement Policy section 4.3: POs to the same vendor for the same scope within 30 days are one requirement.
- **3-way match payment block.** From 1 July 2025, the ERP blocks payment when the invoice and the goods received note (GRN) differ by more than 1%. Only Accounts Payable managers can release the block.
- **Vendor master.** Group Procurement creates and changes vendors. Each new vendor must have due diligence and a related party declaration.

2. Your task

You are a GCAD auditor. Use the 5-step process to answer three business questions:

1. What drives the increase in FY2025 procurement spend?
2. Is there a sign that one or more controls do not work?
3. What must management do, and what is the exposure in RM?

Audience: the CIA, who presents to the BAC. The BAC wants the risk, the amount in RM and the action. They do not want detailed tables.

3. Data files

File	Content	Size
01 GCAD_UC01_Procurement_Spend_MIS_Report.xlsx	MIS report: monthly invoiced spend by BU and category, Jan 2024 to Dec 2025, in crosstab format (one column for each month).	22 category rows x 24 months
02 GCAD_UC02_PO_Register_2024_2025.xlsx	Purchase order register: PO, GRN, invoice, 3-way match result, override and payment for each PO.	5,322 rows, 23 columns
03 GCAD_UC03_Vendor_Master.xlsx	Vendor master: registration, creator, masked bank account, bank changes, due diligence.	106 vendors
04 GCAD_UC04_Budget_Approval_Users.xlsx	FY2025 budget by BU and category, approval limits and policy extract, user directory with system rights.	3 sheets, 59 users

NOTE Each file has a Read_Me sheet. Read it before you start. IDs connect the files: Vendor_ID (02 and 03), user IDs (02, 03 and 04), Business Unit and Category (01, 02 and 04).

4. Do the 5 steps

Step	What you do	Output
1 Understand the context	Write the question, audience, decision, period and scope.	Context card
2 Audit the data	Open each file. Find the layout issues, duplicates, blanks and date ranges. Record the control totals.	Data audit log
3 Build the foundation	Use Power Query to change file 01 into a flat table. Make PivotTables by time, BU and category, with growth % and budget use. Prepare file 02 as a table.	Flat table and baseline PivotTables
4 Hunt for patterns (SCAN)	Find one Spike, one Comparison, one Anomaly and one No-change.	SCAN log
5 Validate and refine	Tie out the totals. Test if each pattern is consistent. Link the files to find the cause. Remove patterns with a valid reason.	Validated findings
Insight	Write two insights: WHAT happened + WHY it matters + WHAT to do.	Two insight statements

Working rules

- Do not change the source files. Save your work in a new workbook.
- Use IDs, not names, to join or filter data.
- Every number in your insight must have a source: file, sheet and filter.
- A total that does not tie is a finding about the data. Fix it before you continue.
- Not every pattern is a problem. Look for a valid business reason before you report it.

5. Your worksheet

Step 1: Context card

Business question

Audience and decision

Period

Scope

Step 2: Data audit log

File	Issue found	Effect	Fix
01			
01			
02			
02			
03 / 04			

Control totals: crosstab Grand Total = _____ PO register invoice total = _____

Step 4: SCAN log

	What you found (with numbers)	Source (sheet, filter)
S Spike / drop		
C Comparison		
A Anomaly		
N No-change		

Step 5: Validation notes

Question	Your answer
Does the math check out?	
Is the pattern consistent across segments?	
What is the cause? (link the files)	
Which pattern has a valid business reason?	

Your insights

[WHAT happened] + [WHY it matters] + [WHAT to do about it]

Insight 1	
WHAT happened	
WHY it matters	
WHAT to do	
One sentence:	

Insight 2	
WHAT happened	
WHY it matters	
WHAT to do	
One sentence:	

Appendix: Data dictionary

File 02: PO register

Field	Meaning
PO_No, PO_Date	Purchase order number and date
Business_Unit, Category	Buying BU and spend category
Vendor_ID, Vendor_Name	Vendor. Use Vendor_ID to join to file 03
Item_Description	What was bought
Requestor_ID, Approver_ID	User who raised the PO and user who approved it
Approval_Level	L1 to L4 (see file 04)
PO_Amount_RM	PO value
GRN_No, GRN_Date, GRN_Amount_RM	Goods received note: value of goods or services received
Invoice_No, Invoice_Date, Invoice_Amount_RM	Vendor invoice
Three_Way_Match	Matched, or Mismatch (invoice and GRN differ by more than 1%), or Not invoiced
Match_Override, Override_By	Y = a user released the payment block. Only from 1-Jul-2025
Payment_Date, Paid_Amount_RM, Payment_Status	Payment details. Status at 31-Dec-2025

File 03: Vendor master

Field	Meaning
Registration_Date, Created_By	When and by whom the vendor was created
Bank_Name, Bank_Account_No	Vendor bank. Account number is masked
Bank_Details_Changed_Date, Bank_Change_Approved_By	Last change to bank details
Last_Due_Diligence_Date	Blank = not done
Related_Party_Declaration	Declared - None, or Not submitted

File 04: Budget, approval limits, users

Sheet	Meaning
FY2025_Budget	Approved budget (RM) by Business_Unit and Category
Approval_Limits	Limit for each level, policy section 4.3, payment block rule
User_Directory	User_ID, role, BU, approval level and ERP system rights